Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1 (currently amended): A switching center for a communications system that provides communications services to customers having wireless and other communications devices, comprising:

> a single platform having a back plane for communication, the single platform. comprising:

>> a first interface, the first interface receiving and sending digital messaging having a first protocol. the first interface comprising:

>>> a first intrasystem message handler. and

>>>> a first intersystem message handler;

>> a second interface, the second interface receiving and sending digital messaging having a second protocol. the second interface comprising:

>>> a second intrasystem message handler. and

>>>> a second intersystem message handler; and

>> a processor system coupled to the first and second interfaces, wherein the processor system controls operation of the first and the second interfaces and generates control messages for sending by the first and the second interfaces.

Claim 2 (cancelled).

Claim 3 (currently amended): The switching center of claim 2 1, wherein the first intrasystem message handler operates according to IS-634 protocols. the second intrasystem and intersystem message handlers operate according to GSM protocols. and the first intersystem message handler operates according to IS-41 protocols.

Claim 4 (original): The switching center of claim 3, wherein the GSM protocols include GSM A (Series 4 and 8) protocols, IS-651 and J-STD protocols, IS-652 protocols and GSM 09.02 protocols.

Claim 5 (original): The switching center of claim 3, wherein the IS-634 and the IS-41 protocols include time division multiple access (TDMA) protocols and code division multiple access (CDMA) protocols and AMPS protocols.

Claim 6 (original): The switching center of claim 1, wherein the first interface further receives and sends analog messaging, the analog messaging including Advanced Mobile Telephone System (AMPS) protocols.

Claim 7 (original): The switching center of claim 6, wherein the AMPS protocols include IS-634 protocols and ISDN PRI+ protocols and proprietary protocols.

Claim 8 (original): The switching center of claim 1, further comprising·

a home location register coupled to the processor system; and

a visitor location register coupled to the home location register and the processor system, wherein the home location register stores permanent data related to customers of the communications system that are homed on the communications system, and wherein the visitor location register stores temporary data related to customers that are active on the communications system, the home location register and the visitor location register indicating a most recent protocol used by a wireless communications device of a customer and indicating other protocols useable by the wireless communications device.

Claim 9 (original): The switching center of claim 8, wherein the permanent data related to customers in the home location register is stored in a customer profile, the customer profile including one or more of call features, call restrictions, mobile unit protocols, line identification, personal identification number, call offering, prepaid services and customer information.

Claim 10 (original): The switching center of claim 8, wherein the home location register includes a common data section and protocol-specific data sections, wherein the common data section stores data generic to all protocols and the protocol-specific data sections stores data unique to one or more specific protocols.

Claim 11 (original): The switching center of claim 8, wherein the processor system determines a protocol of a wireless communications device by reference to one of the home location register and the visitor location register.

Page 3 of 16

WAS-106341 1

PAGE 6/19 * RCVD AT 8/3/2004 10:54:29 AM [Eastern Daylight Time] * SVR:USPTO-EFXRF-1/1 * DNIS:8729314 * CSID:+ * DURATION (mm-ss):07-12

Claim 12 (original). The switching center of claim 1, wherein the communications system includes one or more base stations, and wherein the processor system determines a protocol of a wireless communications device based on a protocol of the base station that communicates between the switching center and the wireless communications device.

Claim 13 (original): The switching center of claim 1, wherein the communications system includes a multi-protocol base station, the multi-protocol base station sending base station control messages to the switching center, and wherein the processor system determines a protocol of a wireless communications device by interpreting protocol data contained in the base station control message.

Claim 14 (original): The switching center of claim 1, wherein the communications system receives communications from an external wireless system having an external home location register and an external communications device registered on the external home location register, and wherein the processor system determines a protocol of the external communications device by obtaining an identification of the external home location register.

Claim 15 (original): The switching center of claim 1, wherein the processor system generates and interprets generic command messages, the generic command messages operable to control the communications services according to at least the first and the second protocols.

Claim 16 (original): The switching center of claim 1, wherein the processor system generates and interprets protocol-specific command messages, the protocol-specific command messages used to provide additional control of the communications services.

Claim 17 (original): The switching center of claim 1, further comprising an asynchronous transfer mode (ATM) interface, the ATM interface providing wireless ATM communications and other packet board communications.

Claim 18 (original): The switching center of claim 1, further comprising a public switched telephone network (PSTN) interface.

Claim 19 (original): The switching center of claim 1, further comprising a private branch exchange (PBX) interface.

WAS.106341 1

Claim 20 (original): The switching center of claim 1, wherein the wireless communications devices include a fixed wireless telephone, a mobile telephone and a computer having a wireless modem.

Claim 21 (original): The switching center of claim 1, further comprising·

an equipment identification register, wherein the equipment identification register includes serial number data related to the mobile communications devices that are homed on the wireless communications system; and

an authentication center, wherein the authentication center provides authentication and encryption parameters for wireless communications received at and originated from the switching center.

Claim 22 (original): The switching center of claim 1, further comprising:

a first device handler coupled to the first interface; and

a second device handler coupled to the second interface, wherein the first and the second device handlers are operable to receive and transmit multi-protocol messaging from and to devices external to the switching center and to transmit and receive generic messaging to and from the first and the second interfaces, respectively.

Claim 23 (original): The switching center of claim 1, wherein the processing system comprises:

a central processor, the central processor controlling operation of the processor system;

an authentication and registration system, the authentication and registration system controlling registration of the wireless communications devices with the communications system and providing encryption and ciphering of voice and data communications;

a paging system, the paging system sending paging messages to the wireless communications devices and receiving page response messages from the wireless communications devices;

a timer system, the timer system setting timers in response to operations of the processing system;

WAS.106341 1

a recovery and startup system, the recovery and startup system managing a status of communications trunks in the communications system and performing audits of the communications system; and

a memory, wherein the memory stores information related to a particular call in a memory area, and wherein components of the processor system access the memory area to retrieve and store information related to the particular call.

Claim 24 (original): The switching center of claim 23, wherein the processor system further comprises a hand off processor, the hand off processor receiving and processing hand off requests from a wireless communications device in the communications system. determining a target base station for hand off and sending a hand off command to the wireless communications device.

Claim 25 (original): The switching center of claim 23, wherein the processor system operates to reserve a voice channel with each base station in the communications system that is capable of receiving communications from the wireless communications device, and wherein the processor system operates to release all base stations having a reserved voice channel. except the target base station, upon receipt by the processor system of a call connect acknowledge message.

Claim 26 (original) The switching center of claim 1, further comprising a graphical user interface, the graphical user interface providing an operator access to operate the switching center and to update data related to the customers, database configuration, system configuration and maintenance.

Claims 27 (cancelled).

Claim 28 (currently amended): The ~~mobile~~ switching center of claim ~~27~~ 1, further comprising a switch management module that manages ~~the~~ switching of the incoming signals.

Claim 29 (currently amended): The ~~mobile~~ switching center of claim ~~27~~ 1, wherein the ~~wireless~~ first and the second interfaces module each comprises a digital interface that supports digital wireless communications.

Claims 30-37 (cancelled).

Claim 38 (currently amended): The ~~mobile~~ switching center of claim ~~27~~ 1. further comprising a wired interface module that provides connections to wired land-lines.

WAS 100341 1

Claim 39 (cancelled).

Claim 40 (currently amended)   The ~~mobile~~ switching center of claim ~~39~~ 26. wherein the graphical user interface is remotely located from the mobile switching center.

Claim 41 (cancelled).

Claim 42 (currently amended). The ~~mobile~~ switching center of claim ~~27~~ 1, further comprising a prepaid module that enables prepaid communication.

Claim 43 (currently amended): The ~~mobile~~ switching center of claim ~~27~~ 1, further comprising a features module that supports a plurality of communication features.

Claim 44 (currently amended): The ~~mobile~~ switching center of claim ~~27~~ 1, further comprising a remote network management access module that is remotely located from and operably connected to the ~~mobile~~ switching center.

Claim 45 (cancelled).

Claim 46 (previously amended)· An advanced intelligent message handler for use in a mobile telecommunications network having mobile communications devices and one or more base stations, the advanced intelligent message handler, comprising:

a first interface for intersystem messaging, the first interface, comprising:

a first GSM processing thread,

a first TDMA processing thread,

a first CDMA processing thread, and

a first AMPS processing thread;

a second interface for intrasystem messaging, the second interface, comprising:

a second GSM processing thread,

a second TDMA processing thread,

a second CDMA processing thread, and

a second AMPS processing thread

WAS-106341 1

a processor system coupled to the first and the second interfaces. the processor system controlling a flow of message traffic to and from the first and the second interfaces; and

a single housing containing the first and the second interfaces and the processor system.

Claim 47 (currently amended)   A method for controlling communications in a multi-protocol wireless network, comprising:

receiving first digital communications according to a first protocol at a first interface in a common housing;

sending a first control message according to the first protocol;

receiving second digital communications according to a second protocol at a second interface in the common housing;

receiving intrasystem communications at a intrasystem message handler;

receiving intersystem communications at a intersystem message handler; and

sending a second control message according to the second protocol, wherein a processor in a switching center interprets the first and the second digital communications and generates the first and the second control messages, and wherein the switching center is located in the common housing.

Claim 48 (cancelled).

Claim 48 (currently amended): The method of claim 4847, wherein the intrasystem message handler operates according to IS-634 and GSM standards and the intersystem message handler operates according to IS-41 and GSM standards.

Claim 50 (original). The method of claim 49, wherein the GSM protocols include GSM A protocols, IS-651 protocols, IS-652 protocols and GSM 09.02 protocols.

Claim 51 (original): The method of claim 49, wherein the IS-634 and IS-41 protocols include time division multiple access (TDMA) protocols and code division multiple access (CDMA) protocols and AMP protocols.

WAS-106341 1

Claim 52 (original): The method of claim 47, wherein the first interface further receives and sends analog communications, the analog communications including Advanced Mobile Telephone System (AMPS) protocols

Claim 53 (original): The method of claim 52, wherein the AMPS protocols include IS-634 protocols and ISDN PRI+ protocols and proprietary protocols

Claim 54 (original): The method of claim 47, further comprising:

creating a home location register, the home location register including a customer profile for each mobile unit in the multi-protocol wireless network, the customer profile indicating protocols available to the mobile and a most recent protocol used by the mobile unit; and

creating a visitor location register, the visitor location register containing the customer profile for each mobile unit that is active in the multi-protocol wireless network.

Claim 55 (original): The method of claim 54, wherein the customer profile further includes call features, call restriction, line identification, personal identification number, call offering and prepaid services

Claim 56 (original)   The method of claim 54, wherein the home location register includes a common data section and a protocol-specific data section, the common data section storing data generic to all protocols and the protocol-specific data sections storing data unique to one or more protocols.

Claim 57 (original): The method of claim 54, further comprising determining a protocol of a wireless communications device by reference to one of the home location register and the visitor location register.

Claim 58 (original): The method of claim 47, further comprising determining a protocol of a wireless communications device by reference to a protocol of a base station that communicates with the switching center.

Claim 59 (original): The method of claim 47, wherein the multi-protocol wireless network includes one or more multi-protocol base stations, wherein the processor determines a protocol of a wireless communications device by interpreting protocol data contained in communications from the one or more multi-protocol base stations.

WAS 106341 1

Claim 60 (original): The method of claim 47, further comprising:

receiving communications from an external communications device from a wireless network external to the multi-protocol wireless network, the external wireless network including an external home location register; and

determining a protocol of the external communications device by obtaining an identification of the external home location register.

Claim 61 (original): The method of claim 47, wherein the processor generates and interprets generic messages, the generic messages providing generic control signals to control operation of the multi-protocol wireless network.

Claim 62 (original): The method of claim 47, wherein the processor generates and interprets protocol-specific messages, the protocol-specific messages providing additional control of the communications devices.

Claim 63 (original): The method of claim 47, further comprising providing packet based communications.

Claim 64 (original): The method of claim 63, further comprising providing an asynchronous transfer mode (ATM) interface providing wireless ATM communications.

Claim 65 (original): The method of claim 64, wherein the ATM interface provides PSTN connectivity and an extension of a switch matrix.

Claim 66 (original): The method of claim 47, further comprising connecting the switching center to a public switched telephone network (PSTN).

Claim 67 (original): The method of claim 47, further comprising connecting the switching center to a private branch exchange.

Claim 68 (original): The method of claim 47, wherein the communications devices include a fixed wireless telephone, a mobile telephone and a computer having a wireless modem.

Claim 69 (original): The method of claim 47, further comprising:

recording an identity of a mobile device; and

encrypting and decrypting the first and the second digital communications.

WAS 106341 1

Claim 70 (original): The method of claim 47, further comprising:

receiving first communications at and sending first communications from a first device handler coupled to the first interface; and

receiving second communications at and sending second communications from a second device handler coupled to the second interface, wherein the first and the second device handlers are operable to receive and transmit multi-protocol communications.

Claim 71 (original): The method of claim 47, further comprising·

sending and receiving registration notification messages to register a mobile unit in a visitor location register;

sending and receiving paging messages to access a mobile unit in the multi-protocol wireless network;

setting a timer to time out control messages;

maintaining a status of communications trunks in the multi-protocol wireless network; and

storing data related to a particular call in a common memory area, the data for the particular call used by components of the multi-purpose wireless network to control and access the particular call.

Claim 72 (original): The method of claim 47, further comprising:

monitoring a signal strength of communications with a mobile communications device;

sending a hand off request when the signal strength exceed a limit;

measuring signal-strengths of each of the other base stations in the multi-protocol wireless network;

reserving a voice channel in each of the other base stations; and

selecting a target base station for communication with the mobile communications device; and

handing off the mobile communications based on the measurements.

WAS 106341 1

App No. 09/245.292
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Claim 73 (original) The method of claim 47. further comprising providing a graphical user interface to the switching center, the graphical user interface allowing an operator to update information stored by the switching center.

Claim 74 (original): The method of claim 47, further comprising;

designating a first communications trunk, the first communications trunk carrying the first control message. wherein the first communications trunk connects a first base station and the switching center; and

designating a second communications trunk, the second communications trunk carrying the second control message, wherein the second communications trunk connects a second base station and the switching center.

Claim 75 (original): The method of claim 47, wherein the switching center comprises a plurality of communications trunks, the switching center designating one or more of the plurality of the communications trunks for use in connecting wireless calls.

Claim 76 (original): The method of claim 75, wherein the switching center tracks a state of each communications trunk of the plurality of communications trunks.

Claim 77 (original): The method of claim 76. wherein a state of a communications trunk may be one of not configured. blocked, unblocked, unblocked pending, call processing, blocked pending and maintenance.

Claim 78 (original): The method of claim 77, wherein the communications trunk transitions from the not configured state to the blocked state when a base station is activated in the wireless network.

Claim 79 (original): The method of claim 77, wherein the communications trunk transitions from the blocked state to the unblocked pending state based on a recovery request.

Claim 80 (original): The method of claim 77, wherein the communications trunk transitions from the unblocked state to the call processing state when a base station is allocated for call processing.

Claim 81 (original): The method of claim 47. further comprising:

receiving a call from a prepaid customer;

Page 12 of 16

WAS 106341 1

processing the call from the prepaid customer:

determining an allowed time of call based on a prepaid account for the prepaid customer;

determining a warning time for the call, wherein the warning time is a time less than the allowed time;

connecting the call;

monitoring a time of the call;

providing a warning to the prepaid customer when the warning time occurs; and

disconnecting the call when the allowed time is reached.

Claim 82 (original): The method of claim 81, further comprising

providing a plurality of rate plans, wherein the prepaid customer may select a desired rate plan from the plurality of rate plans.

Claim 83 (original): The method of claim 82, wherein the desired rate plan is stored in a home location register.

Claim 84 (original): The method of claim 81, further comprising

determining a least cost route for the call from the prepaid customer.

Claim 85 (original): The method of claim 81, further comprising:

at a completion of the call from the prepaid customer, computing an actual cost for the call; and

updating the prepaid account, based on the actual cost for the call

Claim 105 (currently amended): A switching center for communication system that provides communications services to customers having wireless and other communications devices, comprising:

a first interface. the first interface, comprising:

a first intrasystem message handler, and

a first intersystem message handler, the first interface receiving and sending digital messaging having a first protocol;

WAS 106341 1

a second interface, the second interface, comprising:

a second intrasystem message handler, and

a second intersystem message handler, the second interface receiving and sending digital messaging having a second protocol, wherein the second interface comprises an asynchronous transfer mode (ATM) interface, the ATM interface providing wireless ATM communications and other packet communications; and

a processor system coupled to the first and the second interfaces, wherein the processor system controls operation of the first and the second interfaces and generates control messages for sending by the first and the second interfaces; and

a single platform having a communications back plane, the single housing enclosing the first interface, the second interface, and the processor system.

Claim 106. (currently amended) A mobile switching center, comprising:

a central processor that processes incoming signals wherein the incoming signals are switched in a telecommunications network; and

a wireless interface module that supports two or more wireless protocols, wherein the wireless interface module comprises an asynchronous transfer mode (ATM) interface, the ATM interface providing wireless ATM communications and other packet communications, and wherein the ATM interface comprises:

a first intrasystem message handler,

a first intersystem message handler,

a second intrasystem message handler, and

a second intersystem message handler; and

a single platform having a communications back plane, the single housing enclosing the central processor and the wireless interface module.

Claim 107 (currently amended): A switching center for a communication system that provides communications services to customers having wireless and other communications devices, comprising:

a first interface, the first interface receiving and sending digital messaging having a first protocol, the first interface comprising a first intrasystem message handler and a first intersystem message handler; .

a second interface, the second interface receiving and sending digital messaging having a second protocol, the second interface comprising a second intrasystem message handler and a second intersystem message handler; and

a processor system coupled to the first and second interfaces, the processor system comprising a single operating system for communications received at the first and the second interfaces, wherein the processor system controls operation of the first and the second interfaces and generates control messages for sending by the first and the second interfaces; and

a single platform having a communications back plane, the single housing enclosing the first interface, the second interface, and the processor system.